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2                   **ABSTRACT OF DISCLOSURE**

3           A system and method in accordance with the present invention determines

4   in real-time the portions of a set of characters from a data or character stream

5   which satisfies one or more predetermined regular expressions. A Real-time

6   Deterministic Finite state Automaton (RDFA) ensures that the set of characters is

7   processed at high speeds with relatively small memory requirements. An optimized

8   state machine models the regular expression(s) and state related alphabet lookup

9   and next state tables are generated. Characters from the data stream are

10   processed in parallel using the alphabet lookup and next state tables, to determine

11   whether to transition to a next state or a terminal state, until the regular expression

12   is satisfied or processing is terminated. Additional means may be implemented to

13   determine a next action from satisfaction of the regular expression.